

**REMARKS**

In light of the foregoing remarks and amendments set forth herein, reconsideration and withdrawal of the objection and the rejections set forth in the Office Action dated October 26, 2004 are respectfully requested. Claims 1-11 were pending in this application at the time the present Office Action was mailed. In the Office Action, the Examiner objected to the drawings and rejected claims 1-11. Claims 3, 9 and 11 have been amended in this correspondence; accordingly, claims 1-11 are now pending. The Examiner also objected to the drawings for failing to show a recited element in claim 7 and requested the submission of corrected drawings.

**Response to the Objection to the Drawings**

The drawings were objected to as failing to comply with 37 CFR 1.83(a) because the indicated inductive booster in claim 7 was not shown in the Figures. A new complete set of drawings marked "Replacement Sheet" as required by the Examiner, is provided with this response, in compliance with 37 CFR 1.121(d) and 1.84(c). The attached sheet(s) of drawings includes changes to Figure 4, in which the inductive booster providing the output of claim 7 is shown without entering any new matter.

**Response to Section 112 Rejections of Claims 3 and 9**

Claims 3 and 9 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular claims 3 and 9 were rejected for insufficient antecedent basis for reciting "said reference resistor" and "said output," respectively. Claim 3 has been amended to recite "a reference resistor" and claim 9 has been amended to remove the quoted phrase. Accordingly, the undersigned requests the withdrawal of the 35 U.S.C. § 112 rejections of claims 3 and 9.

**Response to Section 103 Rejections of Claims 1-11, Concerning Hugel et al.**

Claims 1 and 3-11, including independent claims 1, 9, and 11, were rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art (Figure 1) in view of

Hugel et al ("Hugel") U.S. Patent No. 5,886,581. In short, the Office Action states that although the admitted prior art does not disclose measuring a voltage representative current of the output and comparing it to a reference current to regulate the output voltage, Hugel teaches such an arrangement.

The undersigned has thoroughly reviewed Hugel and respectfully submits that the Examiner's reading of Hugel is not accurate and that Hugel does not compare two currents for regulating the output voltage, while such comparison is an important feature of the present invention. A careful study of Hugel (col. 5, lines 12-45) proves that Hugel has a voltage comparator (the "comparing means 20," col. 5, line 20) whose output is coupled to the "voltage control circuit" 26 (col. 5, line 35). The inputs to Hugel's "comparing means 20" are voltages. However, in the interest of clarity, applicant has amended Claims 9 and 11 to clearly state, as in claim 1, that the transimpedance block compares sense input voltage representative current to the reference input current.

In addition, Hugel neither attempts to solve the problem being solved by the present invention nor does it even address the problem. Therefore, in light of the above arguments, a *prima facie* case of obviousness under Section 103 has not been established with regard to claims 1, 9, and 11; hence, the undersigned respectfully requests the withdrawal of the respective rejections.

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art and Hugel in view of Wilcox et al, U.S. Patent No. 5,731,694. Claims 2-8 depend from claim 1 and claim 10 depends from claim 9 and hence include the features of claims 1 and 9, respectively. For reasons discussed above and for the additional features of these claims, a *prima facie* case of obviousness under Section 103 has not been established with respect to these claims and accordingly the Section 103 rejections of claims 2-8 and 10 should be withdrawn.

**Response to Section 103 Rejections of Claims 1-11, Concerning Kaminishi et al.**

Claims 1 and 3-11, including independent claims 1, 9, and 11, were rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art (Figure 1) in view of Kaminishi et al ("Kaminishi") U.S. Patent No. 5,777,507. In brief, the Office Action states that although the admitted prior art does not disclose measuring a voltage representative current of the output and comparing it to a reference current to regulate the output voltage, Kaminishi suggests such possibility.

The undersigned respectfully submits that Kaminishi teaches away from the present invention, in addition to the fact that Kaminishi's invention is in the remote and unrelated field of receiving and transmitting optical signals. Kaminishi does not even mention voltage regulation in the entire patent, let alone discussing a feedback arrangement for voltage regulation and its related problems. In the referenced passage by the Examiner (col. 11, lines 55-65), in contrast to the present invention, Kaminishi teaches replacing a differential transimpedance amplifier for converting current to voltage by a differential transimpedance amplifier for converting voltage to voltage. Furthermore, as mentioned above, in the interest of clarity, applicant has amended claims 9 and 11 to clearly state, as in claim 1, that the transimpedance block compares sense input voltage representative current to the reference input current.

Additionally, Kaminishi neither attempts to solve the problem being solved by the present invention nor does it even address the problem, which is further established by his teaching away from the present invention's proposed solution. Therefore, in light of the above arguments, a *prima facie* case of obviousness under Section 103 has not been established with regard to claims 1, 9, and 11; hence, the undersigned respectfully requests the withdrawal of the respective rejections.

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art and Kaminishi in view of Wilcox et al, U.S. Patent No. 5,731,694. Claims 2-8 depend from claim 1 and claim 10 depends from claim 9 and hence include the

features of claims 1 and 9, respectively. For reasons discussed above and for the additional features of these claims, a *prima facie* case of obviousness under Section 103 has not been established with respect to these claims and accordingly the Section 103 rejections of claims 2-8 and 10 should be withdrawn.

**Response to Section 103 Rejections of Claims 1-11, Concerning Baker.**

Claims 1 and 3-11, including independent claims 1, 9, and 11, were rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art Figure 1 in view of Baker (U.S. Patent No. 5,493,211). In sum, the Office Action asserts that although the admitted prior art does not disclose measuring a voltage representative current of the output and comparing it to a reference current to regulate the output voltage, Baker suggests such a possibility.

The undersigned respectfully submits that, contrary to the assertion of the Office Action, Baker does not teach or suggest the replacement of a transimpedance block which receives voltage as input by one that receives current as input. In addition, Baker's invention is in the remote and unrelated field of current probing using "Hall" phenomena and does not even mention voltage regulation let alone using a feedback arrangement and its related problems. In the referenced passage by the Examiner (col. 7, lines 5-10), Baker merely teaches that if the received signal is a current signal, there is no need to convert it to a voltage signal for developing a voltage output, and that the current signal itself, along with a transimpedance, may be used to generate a voltage output.

In contrast, the received signal in the present invention is a voltage signal and it is proposed that although this voltage has been traditionally used to produce a comparison output voltage, it is advantageous to replace it with a representative current signal. Furthermore, as mentioned above, in the interest of clarity, applicant has amended claims 9 and 11 to clearly state, as in claim 1, that the transimpedance block compares sense input voltage representative current to the reference input current.

Baker neither attempts to solve the problem being solved by the present invention nor does it ever address the problem. Baker, unlike the present invention, and as cited by the Office Action, starts by current signals. Therefore, in light of the above arguments, a *prima facie* case of obviousness under Section 103 has not been established with regard to claims 1, 9, and 11; hence, the undersigned respectfully requests the withdrawal of the respective rejections.

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art and Baker in view of Wilcox et al, U.S. Patent No. 5,731,694. Claims 2-8 depend from claim 1 and claim 10 depends from claim 9 and hence include the features of claims 1 and 9, respectively. For reasons discussed above and for the additional features of these claims, a *prima facie* case of obviousness under Section 103 has not been established with respect to these claims and accordingly the Section 103 rejections of claims 2-8 and 10 should be withdrawn.

In view of the foregoing, all of the claims pending in the application are in condition for allowance and, therefore, a Notice of Allowance is respectfully requested. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-6488. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 386168016US from which the undersigned is authorized to draw.

Dated:

1/26/05

Respectfully submitted,

By 

Chun M. Ng

Registration No.: 36,878

PERKINS COIE LLP

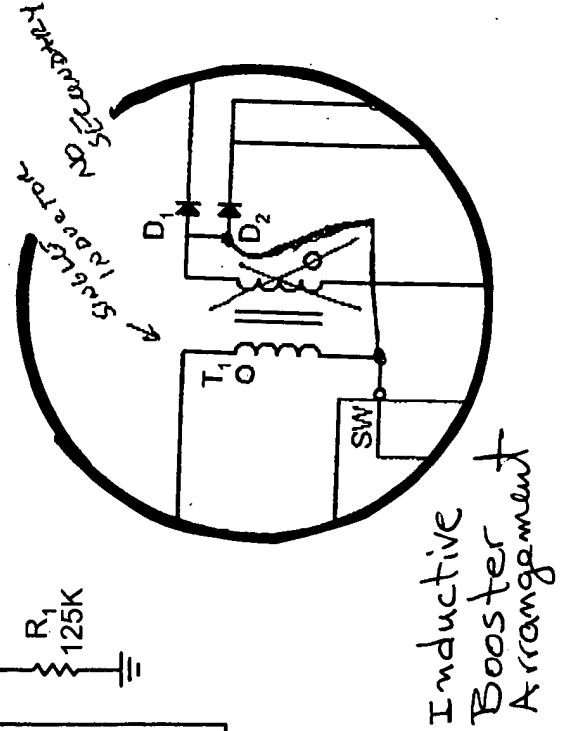
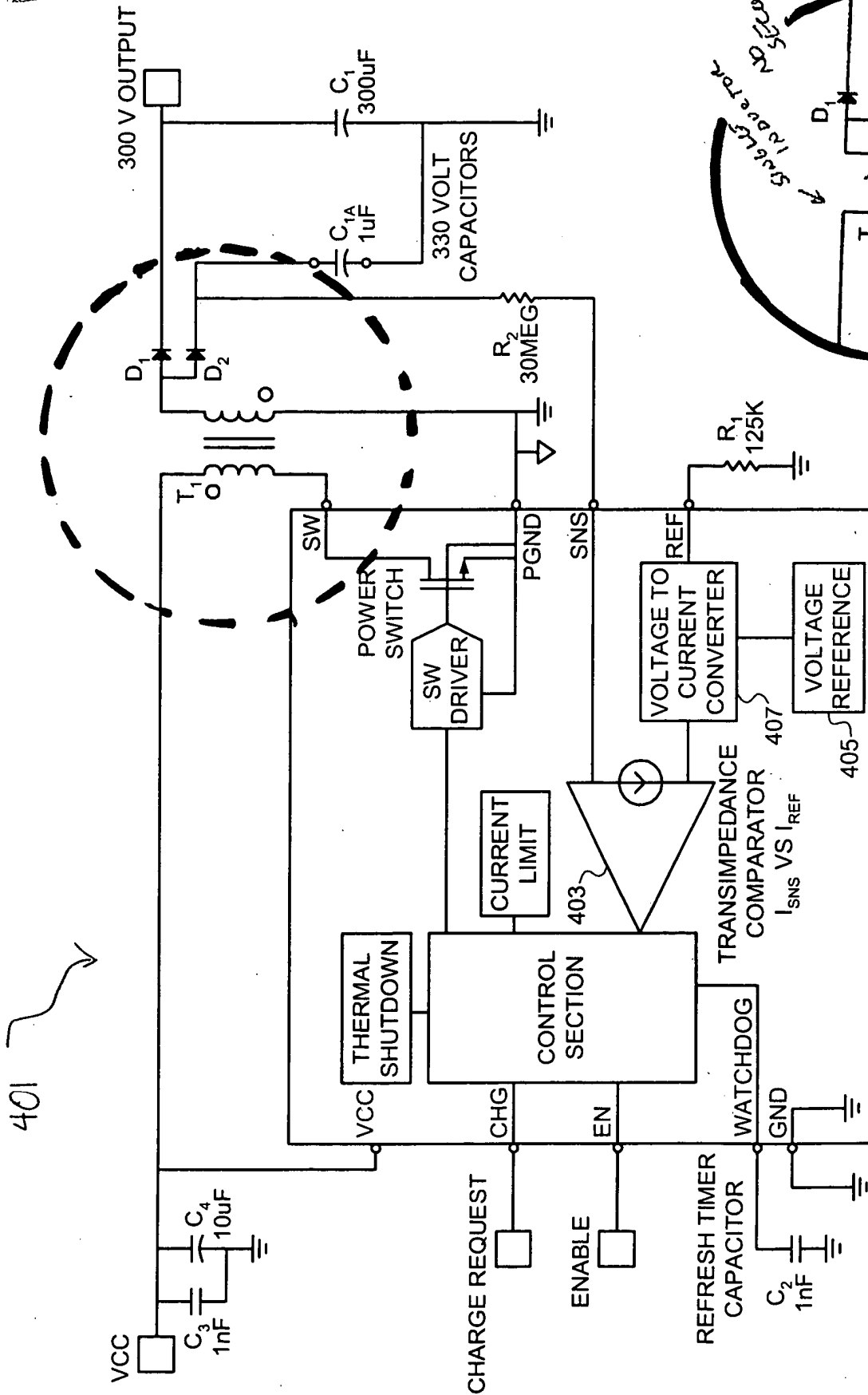
P.O. Box 1247

Seattle, Washington 98111-1247

(206) 359-8000

(206) 359-7198 (Fax)

Attorney for Applicant



**AMENDMENTS TO THE DRAWINGS**

The attached sheet(s) of drawings includes changes to Figure 4, in which the inductive booster providing the output recited in claim 7 is shown without entering any new matter, as per the Examiner's directive. In accordance with the Office's revised format, these drawings have each been labeled "Replacement Sheet".